

Solution for Feline Litter Box Problems:
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Free ranging cats have the freedom to choose their preferred elimination location. They would prefer to avoid eliminating in a spot another cat has used (unless they are marking it). Free ranging cats will not urinate and defecate in the same area, and they do not like to eliminate in public places or cave-like settings. Few households are able to provide that level of choice to their feline members. In spite of this, house cats are surprisingly reliable in the use of the litter box. A breakdown of this appropriate litter box use may have many reasons:

- An aversion to the box, the location, or substrate
- A preference for a particular surface not provided by the box,
- A preference for a particular location where there is no box, or
- A combination of all three.

The reason the litter box problem initially started may not be the same reason it's continuing. For instance, the cat may have urinated outside the box due to a urinary tract infection. Subsequently, the cat has associated the litter box with pain, developed a substrate preference for carpet, and a location preference under the desk in the guest bed room – a secluded area in a room that you hardly ever use. In this case, the successful treatment has to include all three factors (the box aversion, the location preference, and the substrate preference).

Aversion to the Litter Box

Reasons that make a litter box an unpleasant place include:

- The box is not clean enough ('standards' may vary from cat to cat and even throughout a cat's life).
- The cat has experienced painful urination or defecation in the box due to a medical problem.
- The cat has been startled or scared while using the box.
- The cat has been disturbed while in the box (another cat, a child, a dog or by you, if you were attempting to catch her/him for some reason).
- The cat associates the box with punishment (someone punished her/him for eliminating outside the box, then placed her/him in the box).

What to Suggest?

- Scoop at least twice daily and change the litter completely every week. This will vary according to how many cats are in the household, how many litter boxes you have, and how large the cats are that are using the box or boxes.
- If you smell the box, you can be sure it's offensive to your cat.
- Optimize the litter box set-up, litter, and location. Run a preference test (see below).
- Make sure that the litter box isn't near an appliance that makes noise or in an area of the house that your cat doesn't frequent.
- Offer more than one exit from the litter box to avoid the cat feeling trapped or ambushed.

Surface Preferences

Animals develop preferences for a particular surface on which they like to eliminate at an early age. These preferences can change overnight for reasons that we don't always understand. A surface preference is found if:

- The cat eliminates on a particular texture. For example, soft textured surfaces, such as carpet, bedding or clothing, or slick textured surfaces, such as tile, cement, bathtubs or sinks.
- The cat scratches on this texture after elimination (covering up), even if she/he eliminates in the litter box.
- The cat was never trained to use a box (e.g. outdoor cats).

Suggestions

- If your cat is eliminating on soft surfaces use fine grain, scoop-able litter, and put a soft rug under the litter box.
- If your cat is eliminating on slick, smooth surfaces, try putting just a very thin layer of litter at one end of the box, leaving the other end bare, and put the box on a hard floor.
- If your cat has a history of being outdoors, add some soil or sod to the litter box or start training using gardening soil. Add 10% more litter to the soil each week.
- Make the areas that the cat soiled previously aversive (cover with aluminum foil or plastic).

Location Preferences

The cat may have a location preference if:

- She/he uses the same area to eliminate – but not the box.
- She/he eliminates in an area where the litter box was previously kept or where there are urine odors.
- She/he eliminates mostly or often on a different level of the house from where the litter box is located.

Suggestions

- Put at least one litter box on every level of your house.
- Make the area where the cat has been eliminating aversive to her/him by covering it (see above).
- Put litter box in the location where your cat has been eliminating. You can move it once the cat uses it reliably. Be careful to move it very gradually to a location you prefer (inch by inch). Run a preference test (see below).

General Rules and Guidelines

1) Spitefulness

Cats do not engage in behaviors in an attempt to get revenge for something that "offended" or "angered" them. These motives may be human, but generalizing to cats is not possible. Since animals don't act out of spite or revenge, it won't help to punish or scold the animal or give your cat special privileges in the hope that the problem will resolve.

If owners catch a cat "in the act", they can interrupt the behavior (making a startling noise), but have to avoid scaring the cat. Have them take the cat gently to where the litter box is located and set her/him on the floor. Suggest praising the cat verbally after she/he eliminates in the box. Since cats like privacy suggest the owner not to stay close, or pet the cat or feed her/him treats in the box. Cats prefer to have separate feeding locations and places to eliminate.

If the cat eliminates outside of the litter box, discourage the owner from punishing the cat – especially if they find the area after the fact. They should do nothing but clean it up. Rubbing the cat's nose in it, taking her/him to the spot and scolding her/him, or any other type of punishment, will only make her/him afraid of you or afraid to eliminate in the owner's presence. Animals don't understand punishment after the fact, even if it's only seconds later. Punishment will increase anxiety and worsen the problem.

2) Cleaning Soiled Areas

Since the smell of previously soiled areas will encourage the cat to eliminate in this location again, it's essential that owners thoroughly clean the soiled areas:

Visual and olfactory control: have the owner walk around the house daily and find all soiled spots (wet areas, smell). A black-light will usually show even old urine stains (urine has a tendency to fluoresce).

Have them clean the soiled areas carefully as described below.

Help prevent the cat from using the area again (closing the room, placing food or a litter box there).

Suggest improvements for the litter box set up (see below) to erase any reason that may have led to the problem.

In order for the efforts to be successful, owners need to follow all steps. If they fail to completely clean the area, the litter box clean up changes will be of limited success. Please keep in mind that a cat has a much better sense of smell – even if a person can't smell the urine, the cat might if owners failed to neutralize the odor (do not cover it).

Don't!

- Don't recommend the use of steam cleaners to clean urine odors from carpet or upholstery. The heat will permanently set the odor and stain by bonding the protein into any man-made fibers.
- Tell owners to avoid cleaning chemicals, especially those with strong odors. Avoid ammonia or vinegar.
- From a pet's perspective, these don't effectively eliminate or cover the urine odor and may actually encourage the cat to scent mark the area.

Do!

- Cleaning recommendations for owners.
- During the treatment period, cover previously soiled areas with vinyl, tin foil, or heavy plastic (e.g. painting drape).
- Machine – wash any washable item as usual, adding one pound box of baking soda to your regular detergent. Avoid the dryer - air dry items if possible.
- If the scent persists, wash the fabric again and add an enzymatic cleaner (see below).
- If the wood on your furniture, walls, baseboard or floor is discolored, the varnish or paint has been affected by the acid in the urine. You may need to remove and replace the layer of varnish or paint.
- Soak up the urine from the previously soiled spots (towels or paper towels – put a heavy book on top and stand on it). Repeat the process!
- Rinse the soiled spot several times with clean water. Again, remove as much of the water as possible by using towels as described above or a vacuum cleaner that will remove liquid.
- If urine has soaked down into the padding underneath your carpet, you may need to repeat this process more often.
- If the problem has persisted, consider removing and replacing that portion of the carpet and padding.
- If you've previously used cleaners of any kind, then neutralizing cleaners we recommend won't be effective. Rinse every trace of the old cleaner from the carpet. The slightest trace of non –protein-based substance will weaken the effect of the enzymatic cleaner – this applies even if you used the cleaners awhile ago. The enzymatic cleaner will work on degrading the chemicals contained in the carpet – and not the urine.
- It may help to rent an extractor or a vacuum cleaner that allows the use of water. Follow instructions, but don't use any chemicals – just water!
- After assuring that the surfaces are prepared correctly, use a high-quality pet odor neutralizer (examples of commonly recommended brands are: Simple Solution, Nature's recipe, Anti-Icki-Poo). Test the affected surface for staining first, and read and follow the instructions.
- Using the neutralizer on surfaces that are not prepared as recommended will not work.

3) Location, Location, Location!

Most people are inclined to place the litter box in an area that is out of the way and can be cleaned more easily, like the basement or a laundry room. The type of the location, the floor, the distance the cat has to walk and many other factors may contribute to the problem.

Kittens, cats with health issues, and older cats may not be able to get to the litter box in time. A cat that is new to the household may not remember where the litter box is if it's located in an area she/he seldom frequents. Your cat may be startled while using the litter box if a furnace, washer or dryer suddenly comes on.

Although having a litter box on the main floor may be unappealing, owners have to compromise. The litter box should be kept in a location that allows a cat some privacy, but is also conveniently located and always accessible. Depending on where it's located, you might consider cutting a hole in a closet door and adding a cat door. The food and water dish should be as far away from the litter box as possible- never in the same room or area.

4) The Litter

Studies have shown that cats prefer fine-grained litters, presumably because they have a softer feel. The scoopable litters usually have finer grains than the typical clay litter. However, high quality, dust-free, clay litters are relatively small-grained and may be perfectly acceptable to your cat. Potting soil also has a very soft texture, but is not very absorbent. If you suspect the cat has a history of spending time outdoors and is likely to eliminate in houseplants, you can try mixing some potting soil with your regular litter. Pellet-type litters or those made from citrus peels are not recommended.

Once the owner determines a litter the cat likes, don't change types or brands. Buying the least expensive litter or whatever brand happens to be on sale could result in the cat not using the litter box.

Many cats are put off by the odor of scented or deodorant litters and additives, as well as baking soda (bubbling noise when wet). Advise the owner not to place a room deodorizer or air freshener near the litter box. Odor shouldn't be a problem if the litter box is kept clean. If the human family members can smell an aversive scent from the litter box, the cat will find it even more offensive. Cats have an excellent sense of smell!

5) Number of Litter Boxes

The owners should provide at least one more litter box than cats in the house, placed in different levels and areas of the house. Having many boxes, all lined up in the same room, will help to resolve the problem. Make sure that none of the cats will ever be prevented from eliminating in the litter box because it's already occupied or not accessible.

It's not possible to designate a personal litter box for each cat in the household, as cats will use any litter box that's available. However, cats like to use different boxes for urination and defecation. The cats may prefer a certain type of box and a specific location. Some cats may refuse to use the litter box after another cat has used it. All of the litter boxes will need to be kept extremely clean and additional boxes may be needed.

6) Litter Box Types

Avoid automatic litter boxes. Although it may be convenient, cats might be scared by the sudden onset of the cleaning mechanism.

Suggest a box that is large enough for the size of the cat (1.5 times the length of the cat standing), high enough to hold a sufficient amount of litter (1 to 2 inches), but not too high to allow easy access (especially for kittens, sick and older cats).

Some owners prefer to use a covered litter box for esthetic reasons and to avoid litter spilled all over the house; however, there are some potential problems with using this type of box.

- Eliminating in a cave is not part of a cat's inherited behavior patterns.

- One may not see soiled litter and clean it less frequently than needed.

- The cover will prevent ventilation.

- Large cats have less space to turn and to dig or cover the feces or urine.

- Leaving the box may be associated with being ambushed by another cat or dog.

7) Liners

Some cats don't mind having a liner in the litter box, while others do, especially if they are scented.

A preference test might help you determine what your cat likes. If the owner prefers to use a liner, make sure it's anchored in place, so it can't catch the cat's claws or be pulled out of place.

8) Long Hair

Long hair breeds are statistically more often affected by litter box problems when compared to short haired cats. The litter may easily stick to the cat's hair on the paws and surrounding the anogenital area. Clumping litter can get caught in these locations, especially if the hair is wet, and cause problems. Make sure to keep the cat's hair clipped and avoid filling the litter box too high. Allow the cat to choose between a clumping and a non-clumping litter.

9) Preference Tests

In order to find out what the cat really wants, set up a preference test: e.g. you have three litter boxes (B1, B2, and B3). You want to test three litter types/brands (T1, T2, T3). The test will take three weeks:

- Week 1, place litter 1 (T1) into box 1 (B1), T2 into B2, T3 into B3.
- Week 2, you change to: B1 and T2; B2 and T3, B3 and T1
- Week 3, you change to B1 and T3, B2 and T1, B3 and T2

Have the owner keep a log of the litter used in each box, the cleaning schedule (scooping and removing all), and the number of times a cat urinated and defecated in each box. The cat will tell you if she/he prefers a certain litter, a type of box, or maybe a certain location

Limit the number of criteria you test and work systematically.

Urine Marking

It is fairly easy to distinguish between marking and inappropriate elimination if the cat sprays urine on vertical surface (backing up, release of small amounts of urine, twitching tail, treading with the hind legs). The owners will find small amounts of urine on walls and furniture in strategically important locations (passage ways, windows, doors, etc.) Marking on horizontal surfaces is rare.

Most commonly, marking is caused by other cats in the environment that induce territorial conflicts and aggression. Even after living together harmonically, problems can occur suddenly and cause the cats to be insecure and anxious. Other factors that have been linked to marking include: stray cats on the property, cats entering the house through cat flaps, construction and other noises, visitors, changes in family structure, owner's vacation, changes in daily routine, new furniture, and the scent of other animals on the owner's clothing or items that are brought home.

Marking with feces (middening) is comparably rare. Stool is commonly deposited in locations that are associated with specific person (e.g. clothing, spots where a person sat or their pillow in bed).